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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

GUHARAY, KARABI

ART UNIT PAPER NUMBER

2879

DATE MAILED: 01 13 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,361

Examiner

Karabi Guharay

Applicant(s)

LIM, MIN-HO

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 13 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies.

____ (Priority claim(s) of application) has been received.

____ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-894)
- 3) ☐ Statement of Reasons for Allowance (PTO-895)
- 4) ☐ Interview Summary (PTO-896)
- 5) ☐ Notice of Continued Examination (PTO-897)
- 6) ☐ Other:

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "fourth slots" must be shown or the feature(s) canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

(1) On page 3, lines 4-5, recite "when the outermost row slots formed along the long side, i.e., a vertical axis direction, are formed in the convexo-concave shape...."

How can "the long side" is a vertical axis direction?

axes of the first slots are formed without changing as they are - what does it mean -

What is meant by "as they are"? How come there are first slots before first slots are formed ?

(3) At the end of paragraph 2, applicant recites " if the lengths of Y axes of the first slots are less than 70% of those of second slots bridges are formed and the Y-axes of the first and second slots are made in the same length". This is illogical. Y-axes of first and second slots are made in the same length means length of y-axes of first slots is equal to length of the y-axes of the second slots. How come y-axes of first slots are less than 70% of those of second slot at the same time also equal to second slots. Applicant is suggested to write more clearly so that it is comprehensible. Appropriate corrections are required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the maximum length " in line 2 of claim 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Robbins (US 4631440).

Regarding claim 1, Robbins discloses a color CRT (Fig 1) comprising a panel (18) having a luminous screen (phosphor pattern 19, 20, 21) on an inner surface thereof, a funnel portion connected to the panel, an electron gun (12, 13, 14) mounted on a neck portion of the funnel, electron gun emitting electron beams (15, 16, 17) towards the luminous screen, a shadow mask (22) disposed in a fixed interval to the luminous screen, a frame for supporting mask (see Fig 1), shadow mask includes an effective surface having plurality of the slots and a non-effective surface surrounding the effective surface (lines 46-62 of column 2), first slots (33a, 34a, 33b, 34b, of Fig 3) arranged on an outermost row (along top edge 120, Fig 2) second slots being adjacent to first slots in the vertical axis direction (Y-axis) and third slots being adjacent to second slots in the vertical axis direction and fourth slots being adjacent to third slots in the vertical axis direction (see Fig 3) wherein a length of the vertical axis direction of the first slots (33a, 34a, 33b, 34b) is in the range of 70% ~110% of the length of the fourth slots (here fourth slots are all full length slot 33, where as some of the length of the first slots (33a) are equal to full length of the slot 33, which is 100%).

of the second slots (second slots are all full length slots 33) is in the range of 70% ~ 110% of a length of the fourth slots (in this case 100%).

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Regarding claim 3, Robbins discloses that the length of the vertical axis direction of the third slots (third slots are all full length slots 33) is in the range of 70% ~ 110% of a length of the fourth slots (in this case 100%).

Regarding claim 4, Robbins discloses that a minimum length of the vertical axis direction of the first slot (partial slot 34) is more than 63% of the maximum length of the vertical axis direction of the first slot (full length slot 33). See claim 3 of column 4.

Regarding claim 5, Robbins discloses a color CRT (Fig 1) comprising a panel (18) having a luminous screen (phosphor pattern 19, 20, 21) on an inner surface thereof, a funnel portion connected to the panel, an electron gun (12, 13, 14) mounted on a neck portion of the funnel, electron gun emitting electron beams (15, 16, 17) towards the luminous screen, a shadow mask (22) disposed in a fixed interval to the luminous screen, a frame for supporting mask (see Fig 1), shadow mask includes an effective surface having plurality of the slots and a non-effective surface surrounding the effective surface (lines 46-62 of column 2), slots include first slots (33a, 34a, 33b, 34b, of Fig 3) arranged on an outermost row arranged in a vertical direction of the effective surface of the shadow mask (along top edge 120, Fig 2) and a minimum length of the vertical axis direction of the first slot (partial slot 34) is more than 63% of the maximum length of the vertical axis direction of the first slot (full length slot 33). See claim 3 of column 4.

Other Prior Art Cited

1. The prior art cited is known and not relied upon is considered pertinent to

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applicant's disclosure : Godfrey et al. (US 4300070); Good et al. (US 5583391); Barten (US 4751425).


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is (703) 305-1971. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

K.G.
Karabi Guharay
Patent Examiner
Art Unit 2879


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